

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
1 September 2005 (01.09.2005)

PCT

(10) International Publication Number
WO 2005/080036 A1

(51) International Patent Classification⁷: **B23C 5/20 //**
B23B 27/16

(21) International Application Number:
PCT/SE2005/000244

(22) International Filing Date: 22 February 2005 (22.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0400420-6 24 February 2004 (24.02.2004) SE

(71) Applicant (for all designated States except US): **SANDVIK AB** [SE/SE]; S-811 81 Sandviken (SE).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **PANTZAR, Göran** [SE/SE]; Sörbyvägen 41, S-810 22 Årsunda (SE).

(74) Agent: **KLÖFVER, Jörgen**; Sandvik AB, Intellectual Property, S-811 81 Sandviken (SE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

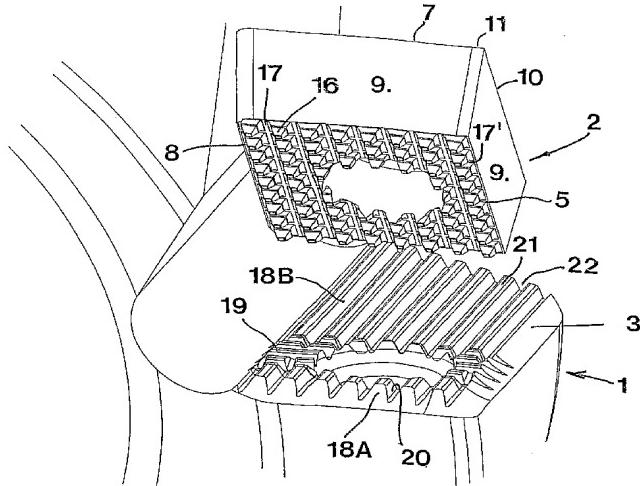
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CUTTING TOOL AND INSERT WITH SERRATED CONTACT SURFACES BETWEEN HOLDER AND INSERT



(57) **Abstract:** The invention relates to a cutting tool of the type that comprises, on one hand, a basic body (1) having an insert seat, and on the other hand a cutting insert (2), which is detachably connected in the insert seat and rigidly secured in the same by means of connecting surfaces (3, 5) of serration type, one (3) of which forms said insert seat and comprises first and second ridges (18, 19), which extends perpendicularly to each other. According to the invention, at least the connecting surface that forms the insert seat (3) is formed with, on one hand, two spaced-apart surface fields or sets of a plurality of mutually parallel, first ridges (18A, 18B), which are arranged in extension of each other, and on the other hand one or more second, transverse ridges (19), which are located between the two sets of first ridges (18A, 18B). Furthermore, the invention also relates to a basic body of a cutting tool, as well as a cutting insert as such.

WO 2005/080036 A1